

## REMARKS

The application has been restricted into 27 groups as follows:

I & II. Claims 1-4, 38 and 41, drawn to the polypeptides of SEQ ID NO: 2 and 6, respectively, classified in class 435, subclass 194.

III & IV. Claims 5-14, 39 and 42, drawn to the nucleic acids encoding the polypeptides of SEQ ID NO: 2 and 6 respectively, classified in class 536, subclass 23.5.

V & VI. Claims 15-17, 40 and 43, drawn to antibodies which bind to the polypeptides of SEQ ID NO: 2 and 6, respectively, classified in class 530, subclass 387.9.

VII & VIII. Claims 18, 44, and 45, drawn to binding assays for detecting or quantifying the polypeptides of SEQ ID NO: 2 and 6, respectively, classified in class 435, subclass 7.4.

IX & X. Claims 19-21, 46, and 47, drawn to binding assays for detecting or quantifying nucleic acids encoding the polypeptides of SEQ ID NO: 2 and 6, respectively, classified in class 435, subclass 6.

XI & XII. Claims 22 and 23, drawn to binding assays for identifying ligands of the polypeptides of SEQ ID NO: 2 and 6, respectively, classified in class 435, subclass 7.1.

XIII & XIV. Claim 24, drawn to cell-based assays for identifying compounds which modulate expression of the polypeptides of SEQ ID NO: 2 and 6, respectively, classified in class 435, subclass 29.

XV & XVI. Claim 25, drawn to methods of modulating activity of the polypeptides of SEQ ID NO: 2 and 6, respectively, in a cell with a ligand, classified in class 435, subclass 375.

XVII & XVIII. Claims 26-29 and 48, drawn to methods for treating diseases with the polypeptides of SEQ ID NO: 2 and 6, respectively, classified in class 514, subclass 2.

XIX & XX. Claims 30-33 and 49, drawn to methods of treating diseases with nucleic acids encoding polypeptides of SEQ ID NO: 2 and 6, respectively, classified in class 514, subclass 44.

XXI & XXII. Claims 34-37 and 50, drawn to methods for treating diseases with antibodies which bind to the polypeptides of SEQ ID NO: 2 and 6, respectively, classified in class 424, subclass 139.1.

XXIII & XXIV. Claim 51, drawn to transgenic animals comprising nucleic acids encoding the polypeptides of SEQ ID NO: 2 and 6, respectively, classified in class 800, subclass 13.

XXV & XXVI. Claim 52, drawn to assay for compounds which modulate expression or activity of the polypeptides of SEQ ID NO: 2 and 6, respectively, in a transgenic animal, classified in class 800, subclass 3.

XXVII. Claim 53, drawn to a transgenic animal with a disruption in a sphingosine kinase gene, classified in class 800, subclass 3.

**Applicants elect, with traverse, Group III, pertaining to species SEQ ID NO:2, claims 5-14, 39 and 42.**

*Groups where restriction is challenged as improper*

Restriction is only proper if the identified groups are independent or patentably distinct (MPEP § 803). The burden is on the Office to provide reasons and/or examples to support its conclusion that the identified groups are patentably distinct.

The Office has characterized the family of inventions I, III, V, VII, IX, XI, XIII, XV, XVII, XIX, XXI, XXIII, and XXV, apparently drawn to SEQ ID NO:2, as being unrelated to the family of inventions II, IV, VI, VIII, X, XII, XIV, XVI, XVIII, XX, XII, XIV, and XXVI, apparently drawn to SEQ ID NO:6. Citing MPEP §§ 806.04 and 808.01, the Office contends that these families are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects. The Office states that cited inventions are unrelated to each other because the polypeptides of SEQ ID NOs: 2 and 6 are structurally different proteins which are not disclosed as being capable of use together, and have different functions and effects.

Applicants submit that the Office has failed to meet the second aspect of this two-part burden, namely that the families of inventions have different modes of operation, different functions, or different effects. The Office is silent as to any aspect of this second prong. Applicants respectfully request that this restriction be withdrawn.

The Office states that polypeptides of inventions I and II are unrelated to the methods of inventions VII-X, XIII-XVI, XIX-XXII, and XXV-XXVI because the polypeptides are not used in these methods. The Office has mis-characterized the inventions VII, VIII, XV, XVI, XXI, and XXII as not requiring polypeptides of inventions I and II. The Office has failed to recite a

specific example to support this contention. Therefore, the Office has failed to satisfy the burden of showing that the inventions are not disclosed as capable of use together. Applicants respectfully request that this restriction be withdrawn.

The Office states that the antibodies of invention V and VI are unrelated to the methods of invention XXV and XXVI. The Office has mis-characterized the inventions XXV and XXVI as not requiring antibodies of inventions V and VI. In particular, the Office has not met its burden of explaining that the inventions are not disclosed as capable of use together. Therefore, Applicants respectfully request that this restriction requirement be withdrawn.

The Office concludes that the methods of inventions VII and VIII, IX and X, XI and XII, XIII and XIV, XV and XVI, XVII and XVIII, XIX and XX, XXI and XXII, and XXV and XXVI are unrelated to each other because they involve different products and method steps, and are directed to different goals and thus have different modes of operation, effects, and functions. The Office has failed to meet its burden by providing a rational explanation or a single, specific example to support its conclusion. The Office has failed to meet its burden justifying this restriction. Therefore, Applicants respectfully request that this restriction requirement be withdrawn.

The Office states that inventions III and IV and inventions IX, X, XIII, XIV, XIX and XX are related as product and process of use. Citing MPEP § 806.05(h), the Office asserts invention relationships are distinct because the product of one invention can be used in a materially different process of using that product. The Office has failed to cited a rational explanation or a single, specific example to support its conclusion. In particular, the Office has failed to explain or provide a specific example of a materially different use for a nucleic acid product that is not already inherent to its structure. The Office has failed to meet its burden justifying this restriction, and Applicants respectfully request that this restriction requirement be withdrawn.

Applicants submit that the Office has not met the necessary burden in order to sustain all aspects of the Restriction Requirement. Withdrawal of the challenged aspects of the restriction is therefore respectfully requested.

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